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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/506,676	09/17/2004	Tomoaki Tsuji	258247US0PCT	6779
22850	7590 09/28/2005		EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.			BROWN, JENNINE M	
1940 DUKE STREET ALEXANDRIA, VA 22314			ART UNIT	PAPER NUMBER
	• .		1755	
			DATE MAILED: 09/28/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
Office Action Commence	10/506,676	TSUJI, TOMOAKI					
Office Action Summary	Examiner	Art Unit					
	Jennine M. Brown	1755					
The MAILING DATE of this communication appeariod for Reply	pears on the cover sheet with the o	correspondence address					
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailling date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tir will apply and will expire SIX (6) MONTHS from a, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. ED (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on							
2a) This action is FINAL . 2b) ☐ This	This action is FINAL . 2b)⊠ This action is non-final.						
3) Since this application is in condition for allowa	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.					
Disposition of Claims							
4) Claim(s) 1-26 is/are pending in the application							
4a) Of the above claim(s) is/are withdra	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.	5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-26</u> is/are rejected.	☑ Claim(s) <u>1-26</u> is/are rejected.						
7) Claim(s) is/are objected to.		•					
8) Claim(s) <u>1-26</u> are subject to restriction and/or	election requirement.	•					
Application Papers							
9) The specification is objected to by the Examine	er.						
10) The drawing(s) filed on is/are: a) □ acc	epted or b)☐ objected to by the I	Examiner.					
Applicant may not request that any objection to the							
Replacement drawing sheet(s) including the correct	tion is required if the drawing(s) is ob	jected to. See 37 CFR 1.121(d).					
11)☐ The oath or declaration is objected to by the Ex	caminer. Note the attached Office	Action or form PTO-152.					
Priority under 35 U.S.C. § 119	•	•					
12)⊠ Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a))-(d) or (f)					
a)⊠ All b)□ Some * c)□ None of:							
1. Certified copies of the priority document	s have been received.						
							
3. Copies of the certified copies of the prior							
application from the International Bureau	u (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list	of the certified copies not receive	ed.					
·							
Attachment(s)	" □						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date							
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) D Notice of Informal P	atent Application (PTO-152)					
Paper No(s)/Mail Date <u>9/17/04;11/18/04</u> .	6) Other:	·					

Information Disclosure Statement

The information disclosure statements (IDS) submitted on 9/17/04 and 11/18/04 were considered by the examiner.

Claim Objections

Claims 1-26 are objected to because of the following informalities: the transitional phrases are not standard transitional phrases for US practice. Appropriate correction is required. Examiner assumes that all transitional phrases are equivalent to "comprising".

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3 and 18-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 is indefinite because the structure is named incorrectly. The "bis" should be on the outside of the parenthesis of the name on every named structure.

Claims 18-26 recites the limitation "a process for producing aldehydes" but they are dependent upon claim 11, which is drawn to A Group VIII metal complex. There is insufficient antecedent basis for this limitation in the claim. The claims cross statutory categories and therefore are improper. These limitations will no longer be treated on

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the merits. When claims 18-26 are amended they will be withdrawn because applicant has already received an office action on the merits on claims 1-17.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-3, 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bahrmann, et al. (US 5922634 A).

See entire document. Bahrmann, et al. disclose a bisphosphine represented by formula (I) :

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$$\begin{bmatrix} R_a^1 & & & \\ & & & \\ R_b^1 & & & \\ \end{bmatrix}^p - R^2 - P \begin{bmatrix} R_b^1 & & \\ & & \\ & & \\ \end{bmatrix}^p \begin{bmatrix} H - N - R^4 \\ R^4 \end{bmatrix}^p$$

wherein R² is an oxygen containing

alkylene of 2-6 carbon atoms represented by –(CH₂)₂-O-(CH₂)₂- and is coupled to rhodium compounds (col. 6, l. 14-31). Although the structure is not identical to that of the instant claims, a prima facie case of obviousness may be made when chemical compounds have very close structural similarities and similar utilities. "An obviousness rejection based on similarity in chemical structure and function entails the motivation of one skilled in the art to make a claimed compound, in the expectation that compounds similar in structure will have similar properties." In re Payne, 606 F.2d 303, 313, 203 USPQ 245, 254 (CCPA 1979). See In re Papesch, 315 F.2d 381, 137 USPQ 43 (CCPA 1963) (discussed in more detail below) and In re Dillon, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1991) (discussed below and in MPEP § 2144) for an extensive review of the case law pertaining to obviousness based on close structural similarity of chemical compounds. See also MPEP § 2144.08, paragraph II.A.4.(c).

Claims 4-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bahrmann, et al. (US 5922634 A) in view of Harold de la Mare, et al. (US 3532772 A).

Bahrmann, et al. disclose a bisphosphine compound as disclosed supra but does not specifically disclose an alkali metal phosphide reacted with a bisaryl compound to synthesize formula (I). It would have been obvious to use known compounds such as

alkali metal phosphide compounds reacted with the bisaryl compound to form the formulated compound so that the alkyl groups are directly linked to the phosphorus

rather than oxygen groups by using a known reaction mechanism such as that given by Harold de la Mare, et al. Although the method is not identical, the principles of

combining the phosphorus with an alkyl group are the same and would therefore

provide the ligand as claimed by applicants.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennine M. Brown whose telephone number is (571) 272-1364. The examiner can normally be reached on M-R 9:30 AM - 7:30 PM; Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jmb

SUPERVISORY PATENT EXAMINER